

**Amendments to the Claims**

1. *(Original)* A use-authorization device for security-related applications, in particular access control to secure areas or for securing vehicles, with
- a user-end key unit for generating consecutive, alternating user code information which has a sequence of consecutive function values  $v_{i+1} = F(v_i, \text{const})$  for  $i = 0, \dots, N$  through the repeated use of a one-way function  $F(v_i, \text{const})$ , which function values are used in inverse order to the sequence formation to create the consecutive user code information; and
  - an application-end processing unit for determining actual authorization information which is dependent upon the user code information received from the key unit and for performing a use-authorization checking process by comparing this actual authorization information with the application-end desired authorization information, as well as for generating use-release information depending on the result of the comparison, wherein the desired authorization information has a function value  $v_i$  which has been transferred from the user code information which had been processed during the previous positive use-authorization operation; characterized in that
  - there is a certain number of levels  $G$  provided from which a certain number of iterative function value calculations can be performed in each level by means of the one-way function  $F(v_i, \text{const})$ , and
  - there are  $G = \lceil L(N)/b \rceil$  levels, wherein  $N$  is the starting value,  $L(N)$  is the number of bits required for representing  $N$  in the dual system and  $b$  is the basis.
2. *(Original)* A device as claimed in claim 1, characterized in that there is a support point  $s(i)$  where  $i = (1, \dots, G)$  provided for each level.
3. *(Original)* A device as claimed in claim 2, characterized in that the values for the support points  $s(i)$  are determined from the equation

$$s(i) = N - \sum_{j=1}^i (2^b)^j$$

4. *(Currently Amended)* A device as claimed in ~~any one of claims 2 or 3~~claim 2, characterized in that no function values can be calculated for support points with a negative index.

5. *(Currently Amended)* A device as claimed in ~~at least one of claims 2 to 4~~claim 2, characterized in that the parameter  $b$  is adapted for a specified number of support points in such a way that the function value calculations per use authorization are minimized.

6. *(Currently Amended)* A device as claimed in ~~at least one of claims 2 to 5~~claim 2, characterized in that, starting from the current support point  $s(i)$ , there should be a certain number of function values calculated in each level in descending order and saved as intermediate values.

7. *(Original)* A device as claimed in claim 2, characterized in that an intermediate value for the support point in a level should be reset successively in this level once this intermediate value, as a new support point, has been transferred to the next level down.

8. *(Currently Amended)* A device as claimed in ~~at least one of the preceding claims~~claim 1, characterized in that the starting value is  $N = (2^b)^G$ .

9. *(Currently Amended)* A device as claimed in ~~at least one of claims 1 to 7~~claim 1, characterized in that the starting value is  $N \in \{(2^b)^{G-1}, \dots, (2^b)^G - 1\}$ .

10. *(Currently Amended)* A device as claimed in ~~at least one of the preceding claims~~claim 1, characterized in that there were several buffers provided for saving intermediate values which are calculated from the function values.

11. *(Original)* A device as claimed in claim 10, characterized in that the buffers are FIFO memories.